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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/931,585   | 08/15/2001  | Stephen D. O'Connor  | 266/263             | 2200             |
| 32763  | 7590        | 11/17/2004           | EXAMINER            |                  |
| NANOSTREAM, INC.<br>580 SIERRA MADRE VILLA AVE.<br>PASADENA, CA 91107-2928 |             |                      | WOOD, KEVIN S       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2874                |                  |

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/931,585

Applicant(s)

O'CONNOR ET AL.

Examiner

Kevin S Wood

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5,7-10,13,14,21,24-27,30,32,33,36 and 42-61 is/are pending in the application.
- 4a) Of the above claim(s) 7-9,14,21,24-27,30,32,33,36 and 53-61 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,10,13 and 42-52 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **SUPPLEMENTAL ACTION**

### ***Response to Election***

1. Claims 7-9, 14, 21, 24-27, 30, 32, 33, 36, and 53-61 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 30 August 2004.
2. This application is in condition for allowance except for the presence of claims 7-9, 14, 21, 24-27, 30, 32, 33, 36, and 53-61 to an invention non-elected with traverse in the reply filed on 30 August 2004. Applicant is given ONE MONTH or THIRTY DAYS from the date of this letter, whichever is longer, to cancel the noted claims or take other appropriate action (37 CFR 1.144). Failure to take action during this period will be treated as authorization to cancel the noted claims by Examiner's Amendment and pass the case to issue. Extensions of time under 37 CFR 1.136(a) will not be permitted since this application will be passed to issue.

The prosecution of this case is closed except for consideration of the above matter.

### ***Response to Arguments***

3. The applicant has presented a variety of arguments with regards to why the Requirement for Restriction mailed on 11 August 2004 is improper. The examiner has thoroughly reviewed these arguments, but firmly believes the Requirement for Restriction to be proper.

The applicant argues that the restriction should have been made in the first office action. The examiner admits the application should have been restricted in the first action, however, the mere fact that the restriction was made after previous actions on the merits does not make it improper. The examiner apologizes for regrets any inconvenience that this late restriction has caused, but the restriction is proper due to the burden of searching multiple inventions.

The applicant's primary argument seems to be that the restriction is improper because there is no serious burden upon the examiner. The examiner disagrees with this argument. It is clear that the applicant is claiming multiple and distinct inventions which require separate and distinct searches within the art. The applicant cites the search reports provided by the examiner, by pointing out that the examiner text searched within all of class 385. The applicant claims this is proof that the search is not a burden. The examiner believes it proves the opposite. Instead of being able to focus the search on a few subclasses relevant to each invention, the examiner has been forced to search virtually an entire class of inventions to find the relevant prior art for all of the claimed inventions.

The applicant argues that there can be no burden because the examiner has already searched the inventions. The examiner respectfully disagrees with this argument. The examiner has attempted to search each of the claimed inventions, but has been unable to properly focus the searches for each of the claimed inventions.

It should be noted that at no point does the applicant argue that the restriction is improper for any reason other than it comes later in the prosecution of the application

Art Unit: 2874

than is typical. This seems to be an admission that the application should have been restricted, but the restriction is somehow too late and therefore searching it is no longer a serious burden on the examiner. The examiner respectfully disagrees with this argument. The applicant seems to be implying that the searching process is over, when in fact each of the inventions must be searched again prior to allowance. The applicant is also implying that any restriction after an action on the merits is inherently improper. That argument is contradicted by portions of the MPEP cited by the applicant in his arguments.

The applicant takes issue with the examiner's form paragraph, within Requirement for Restriction mailed on 11 August 2004, that stated the examiner called the applicant on 11 August 2004. The applicant states that the "tone" of the form paragraph implies that contact was made with the applicant. For clarification of the record, the examiner called Mr. Gustafson on 11 August 2004, but no contact was made and no voice mail message was left.

#### ***Election/Restrictions***

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 5, 10, 13, and 42-52, drawn to a microfluidic optical systems wherein a plurality fluids are substantially mixed in order to affect light incident on the fluids, classified in class 385, subclass 140.
  - II. Claims 7-9, 14, 24, 26, 27 and 53-55, drawn to a microfluidic system and a method of optical switching using immiscible fluids defining a discrete

Art Unit: 2874

plug, where a deformable flexible member manipulates the plug, classified in class 385, subclass 19.

- III. Claim 25, drawn to a method for performing optical switching, using immiscible fluids defining a discrete plug, where a plurality of electrodes are used to manipulate the plug, classified in class 385, subclass 19.
- IV. Claims 30, 32, 33 and 36, drawn to a method for performing optical switching using a deformable member that is substantially reflective, classified in class 385, subclass 18.
- V. Claims 56, 21 and 57-61, drawn to an optical processing system having a sensor and a feedback signal, classified in class 385, subclass 16.

The inventions are distinct, each from the other because of the following reasons:

- 5. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an optical attenuator. See MPEP § 806.05(d).
- 6. Inventions I and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as optical attenuator. See MPEP § 806.05(d).
- 7. Inventions I and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are

Art Unit: 2874

shown to be separately usable. In the instant case, invention I has separate utility such as an optical attenuator. See MPEP § 806.05(d).

8. Inventions I and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an optical attenuator. See MPEP § 806.05(d).

9. Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as an optical switch without electrodes. See MPEP § 806.05(d).

10. Inventions II and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as optical switch. See MPEP § 806.05(d).

11. Inventions II and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an optical switch without a feedback system. See MPEP § 806.05(d).

12. Inventions III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention III has separate utility such as an optical switch. See MPEP § 806.05(d).

Art Unit: 2874

13. Inventions III and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention III has separate utility such as optical switch without a feedback system. See MPEP § 806.05(d).

14. Inventions IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention IV has separate utility such as an optical switch without a feedback system. See MPEP § 806.05(d).

15. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II, III, IV and V, restriction for examination purposes as indicated is proper.

16. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Groups I, III, IV and V, restriction for examination purposes as indicated is proper.

17. Because these inventions are distinct for the reasons given above and the search required for Group III is not required for Groups I, II, IV and V, restriction for examination purposes as indicated is proper.

18. Because these inventions are distinct for the reasons given above and the search required for Group IV is not required for Groups I, II, III and V, restriction for examination purposes as indicated is proper.



Art Unit: 2874

19. Because these inventions are distinct for the reasons given above and the search required for Group V is not required for Groups I, II, III and IV, restriction for examination purposes as indicated is proper.

20. A telephone call was made to Vincent Gustafson on 8/6/04 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

21. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Allowable Subject Matter***

22. Claims 5, 10, 13, and 42-52 are allowable.


**Conclusion**

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (571) 272-2364. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Sung Pak  
Patent Examiner  
AU 2874